

Amendments to the claims:

1. (Currently Amended) A method for fail-safe renaming of logical circuit identifiers for rerouted logical circuits in a data network, the method comprising:

providing a network management module [[for]] to:

renaming rename a first logical circuit identifier for a first logical circuit in the data network to a second logical circuit identifier for a second logical circuit utilized for rerouting data from the first logical circuit in the data network; and

receiving receive a customer report indicating a network circuit failure in the data network, wherein the network circuit failure is detected by receiving trap data indicating the network circuit failure, wherein the trap data comprises status information indicating that a switch in the data network is discarding frames or cells;

identifying, in response to the customer report, a failure in the first logical circuit; and

renaming, in response to the failure, a logical circuit label for the first logical circuit in a logical element module in communication with the network management module,

wherein the renamed logical circuit label is utilized to indicate that the logical circuit data from the first logical circuit has been rerouted, and

wherein the renamed logical circuit label includes the status of the first logical circuit and indicates that the first logical circuit identified by a customer ID for communicating data between [[a]] first and second ~~location~~ locations has been rerouted.

2. (Currently Amended) The method of claim 1, wherein ~~renaming a the network~~ management module renames the first logical circuit identifier for [[a]] ~~the~~ first logical circuit in the data network to [[a]] ~~the~~ second logical circuit identifier for [[a]] ~~the~~ second logical circuit utilized for rerouting data from the first logical circuit in the data network, ~~comprises by:~~

accessing a network device provisioned for routing data over the first logical circuit in the data network;

deleting the first logical circuit in the network device upon detecting a failure in the first logical circuit;

provisioning the second logical circuit in the network device for rerouting the data from the first logical circuit, wherein provisioning the second logical circuit includes assigning the second logical circuit identifier to identify the second logical circuit; and

renaming the first logical circuit identifier to the second logical circuit identifier.

3. (Original) The method of claim 1, wherein the second logical circuit is a logical failover circuit in the data network.

4. (Previously Presented) The method of claim 1, wherein the second logical circuit is a currently unused logical circuit in the data network.

5. (Original) The method of claim 1, wherein the first logical circuit identifier is a data link connection identifier (DLCI).

6. (Original) The method of claim 1, wherein the second logical circuit identifier is a data link connection identifier (DLCI).

7. (Original) The method of claim 1, wherein the first logical circuit identifier is a virtual path/virtual circuit identifier (VPI/VCI).

8. (Original) The method of claim 1, wherein the second logical circuit identifier is a virtual path/virtual circuit identifier (VPI/VCI).

9. (Original) The method of claim 1, wherein the first and second logical circuits are permanent virtual circuits.

10. (Original) The method of claim 1, wherein the first and second logical circuits are switched virtual circuits.

11. (Original) The method of claim 1, wherein the data network is a frame relay network.

12. (Original) The method of claim 1, wherein the data network is an asynchronous transfer mode (ATM) network.

13. (Currently Amended) A system for fail-safe renaming of logical circuit identifiers for rerouted logical circuits in a data network, the system comprising:
- a network device ~~for establishing~~ to establish a communication path for a logical circuit and a logical failover circuit in the data network;
  - a logical element module in communication with the network device ~~[[for]] configuring to configure~~ the logical circuit and the logical failover circuit; and
  - a network management module, in communication with the logical element module, ~~[[for]]~~ to:
    - ~~receiving~~ receive a customer report indicating a network circuit failure in the data network, wherein the network circuit failure is detected by receiving trap data indicating the network circuit failure, wherein the trap data comprises status information indicating that a switch in the data network is discarding frames or cells;
    - ~~identifying~~ identify, in response to the received customer report, a failure in the logical circuit;
    - ~~deleting~~ delete the communication path for the failed logical circuit in the network device;
    - ~~establishing~~ establish the communication path for the logical failover circuit to reroute the data from the failed logical circuit;
    - ~~assigning~~ assign a logical failover circuit identifier to identify the logical failover circuit;
    - ~~renaming~~ rename a logical circuit identifier for the failed logical circuit to the logical failover circuit identifier in the network database; and
    - ~~renaming~~ rename, in response to the failure, a logical circuit label for the failed logical circuit in the logical element module,
      - wherein the renamed logical circuit label is utilized to indicate that the logical circuit data from the failed logical circuit has been rerouted, and
      - wherein the renamed logical circuit label includes the status of the failed logical circuit and indicates that the failed logical circuit identified by a customer ID for communicating data between ~~[[a]]~~ first and second ~~location~~ locations has been rerouted.

14. (Original) The system of claim 13, wherein the logical circuit identifier is a data link connection identifier (DLCI).

15. (Original) The system of claim 13, wherein the logical failover circuit identifier is a data link connection identifier (DLCI).

16. (Original) The system of claim 13, wherein the logical circuit identifier is a virtual path/virtual circuit identifier (VPI/VCI).

17. (Original) The system of claim 13, wherein the logical failover circuit identifier is a virtual path/virtual circuit identifier (VPI/VCI).

18. (Original) The system of claim 13, wherein the logical circuit and the logical failover circuit are permanent virtual circuits.

19. (Original) The system of claim 13, wherein the logical circuit and the logical failover circuit are switched virtual circuits.

20. (Original) The system of claim 13, wherein the data network is a frame relay network.

21. (Original) The system of claim 13, wherein the data network is an asynchronous transfer mode (ATM) network.

22. (Currently Amended) A method for fail-safe renaming of logical circuit identifiers for rerouted logical circuits in a data network, the method comprising:
- providing a network management module [[for]] to:
    - ~~receiving~~ receive a customer report indicating a network circuit failure in the data network, wherein the network circuit failure is detected by receiving trap data indicating the network circuit failure, wherein the trap data comprises status information indicating that a switch in the data network is discarding frames or cells;
    - ~~identifying~~ identify, in response to the customer report, a failure in a first logical circuit;
    - ~~accessing~~ access, in response to the failure, a network device provisioned for routing data over the first logical circuit in the data network;
    - ~~deleting~~ delete the first logical circuit in the network device;
    - ~~provisioning~~ provision a second logical circuit in the network device ~~for rerouting to reroute~~ the data from the first logical circuit, wherein ~~provisioning the network management module provisions~~ the second logical circuit ~~includes by~~ assigning a second logical circuit identifier to identify the second logical circuit; and
    - renaming a first logical circuit identifier to the second logical circuit identifier; and
    - renaming a logical circuit label, in response to the failure, for the first logical circuit in a logical element module in communication with the network management module,
  - wherein the renamed logical circuit label is utilized to indicate that the logical circuit data from the first logical circuit has been rerouted, and
  - wherein the renamed logical circuit label includes the status of the first logical circuit and indicates that the first logical circuit identified by a customer ID for communicating data between [[a]] first and second ~~location~~ locations has been rerouted.